May 5, 2006

Melissa Hall, NPDES Unit
California Water Resources Control Board
Central Valley Region, NPDES Unit
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

RE: Comments on Tentative Waste Discharge Requirements (NPDES No. CA0085171) and Tentative Time Schedule Order for the California Department of Parks and Recreation ("State Parks"), Empire Mine State Historic Park ("Empire Mine")

Dear Ms. Hall:

Thank you for your thoughtful consideration of comments from our Deltakeeper Chapter of Baykeeper ("Deltakeeper") on the tentative National Pollutant Discharge Elimination System ("NPDES") permit and Compliance Schedule, and the Time Schedule Order ("TSO") for the discharge of pollutants associated with past mining activity from the "Magenta Drain" at Empire Mine. While Deltakeeper acknowledges the work the Regional Board has done towards creating a permit for this hazardous discharge, we have major concerns that the proposed tentative permit and compliance schedule as well as its accompanying TSO will not adequately protect the aquatic environment, the surrounding community nor area fish and local wildlife from toxic levels of contaminants coming form the Magenta Drain discharge.

In this letter, Deltakeeper provides the Regional Board background on Empire Mine and the Magenta Drain discharge and specifically addresses the reasons a stringent permit is critical to protect the environment and the Grass Valley community as well as to accomplish the goals of Deltakeeper's Consent Decree with State Parks. We will then delineate the permit's inadequacies with respect to (1) the Time Schedule Order, (2) the Compliance Schedule and the Interim Effluent Limitations that are orders of magnitude above both State and Federal Water Quality Standards, and (3) Monitoring Requirements.

I. Background on the Magenta Drain and its Toxic Discharge

A. Magenta Drain

Empire Mine, located in Grass Valley, was the richest hard rock mine in California's history. The mine operated for 106 years and produced 5.8 million ounces of gold. It ceased operations in 1956, and in 1975 the State purchased the surface rights and opened Empire Mine State Park to the public. The above ground park consists of 856 acres with eight miles of trails. The Magenta Drain is connected to a tunnel that begins at or near the 400-foot level of the Empire Mine shaft. The tunnel runs under land owned by Department of State Parks and Recreation ("State Parks"), private landowners, and Highway 174. The historic use of the Magenta Drain is to drain excess water that builds up in the mineshafts. The Magenta Drain discharges the excess water from the mineshafts to an unnamed tributary of the South Fork of Wolf Creek. The Magenta Drain is located in a residential area and polluted wastewater discharging from the Magenta Drain flows through a recreational park used by local residents and tourists.

The discharge from the Magenta Drain occurs year round and has a flow that ranges from 75 gallons per minute to over 700 gallons per minute depending on the season.[1] The Magenta Drain Report reveals the massive amounts of pollutants discharging from the Magenta Drain into the local creek. In particular, the discharge from Magenta Drain has levels of arsenic, iron, manganese, and thallium well above the applicable water quality standards. Sampling of the Magenta Drain discharge also reveals that copper, zinc, aluminum, cadmium, lead, and nickel are also present in the discharge at levels that are adversely impacting the aquatic environment. Additionally, immediately downstream of the discharge, the Magenta Drain Report indicates the presence of ferric iron oxyhydroxide ("yellow boy") "coating the creek with a thick layer..." *Magenta Drain Report*, ES-3. Upon sampling, the yellow boy was found to be a hazardous material since it contains concentrations of arsenic above the soluble threshold limit concentration ("STLC"). All told, the Magenta Drain Report indicates that the water discharging from the Magenta Drain should be of great concern to the Regional Board and the public.

B. Risk to Aquatic Environment and Wildlife

As explained above, the Magenta Drain Report demonstrates that pollutants present in the Magenta Drain discharge are at dangerously high levels. The creek receiving the Magenta Drain discharge, after leaving Empire Mine property and crossing through the city park, dives underground until entering the South Fork of Wolf Creek, Wolf Creek, and the Bear River in the Sacramento River watershed. This creek is a tributary into an important riparian watershed, home to a variety of fish, wildlife and birds. This watershed contributes to downstream water quality into the Delta, drinking sources for 23 million people and home to threatened aquatic life.

The dangerously high interim limits and lengthy compliance schedule of this tentative permit cannot possibly protect the health of aquatic life and wildlife in this watershed.

This historical mine park provides Californians an opportunity to appreciate the cultural heritage of mining in a beautiful, 805 acre forested park near Grass Valley. Now, perhaps even more importantly, Empire provides the State an incredible chance to exemplify how to most appropriately and efficiently address the tragic toxic legacy of the Gold Rush. Deltakeeper, for several years, has been committed to protecting local waterways from toxic mine runoff both from stormwater and from the year-round drainage, "Magenta Drain," addressed in this tentative permit.

C. Risk to Local Residents

Grass Valley citizens have long been concerned about a discolored, year-round drainage from Magenta Drain's portal on State Parks' land into an unnamed waterway that traverses an incredibly public part of the town, including a city park. Even today, this contaminated creek is accessible right next to city tennis courts, from a trail along one side all the way to the portal and from backyards of houses where

[1] In March 2005, Tetra Tech EM, Inc. ("Tetra Tech") prepared a Source Assessment and Evaluation of Remediation Measures for Metals in Surface Water ("Magenta Drain Report" or "Report") for State Parks.

children's toys are readily visible. Soil discoloration and "yellow boy" remains visible at the portal site. Magenta Drain is not an out-of-the-way, hidden little waterway but a dangerous one frequently used by the families of Grass Valley trying to enjoy their neighborhood.

The tentative permit allows State Parks to discharge a highly toxic level of effluent for years and years—all the while placing these neighborhood families at risk.

II. Regional Board Action, Legal History, and Deltakeeper and State Parks Consent Decree

A. Historical Regional Board Action Regarding Magenta Drain

Deltakeeper is pleased that after two decades of being aware of the toxic discharge and the Parks' need for a Clean Water Act permit, the Regional Board is now taking action. However, this action requires neither immediate control of the discharge nor measures to protect water quality. A review of regulatory agency files by Deltakeeper indicates in 1981 the Regional Board notified State Park that leachate from tailings were posing a "serious threat to water quality in Little Wolf Creek." Yet, the Regional Board neither required that State Parks abate this harm, nor apply for a permit to regulate the harm.

In January 2002, a Grass Valley resident notified the Regional Board that the Magenta Drain discharge was turning the creek a yellowish/orange color. A subsequent investigation by Regional Board staff revealed the presence of "yellow boy" in the creek that the Magenta Drain discharges into. In February 2002, the Regional Board sent State Parks a letter requesting that they file a report of waste discharge. In a letter dated April 15, 2002, the Regional Board requested a complete technical report identifying the source of the pollutants emanating from Empire Mine. Further, the Regional Board notified State Parks of their requirement to obtain coverage under the Industrial Permit. In a letter to the Regional Board dated April 22, 2002, State Parks "declined" to obtain permit coverage. The Regional Board did not pursue the matter further and the discharge from Magenta Drain remained unpermitted. As explained below, under the tentative permit the Magenta Drain discharge will essentially continue to go unregulated.

B. Deltakeeper's Citizen Enforcement Suit

In October 2004, Deltakeeper sent a Notice of Violation and Intent to File Suit to the United States Environmental Protection Agency, and the Executive Director of the California State Water Resources Control Board under Sections 505(a) of the Federal Water Pollution Control Act (the "Clean Water Act" or "CWA"), 33 U.S.C. §§ 1365(a)(1) and (f) and a Supplemental Notice of Violation and Intent to File Suit under Sections 505(a) of the Clean Water Act, 33 U.S.C. § 1365(a)(1) and (f), and Section 7002(a)(1)(B) of the Resource Conservation and Recovery Act (the "RCRA"), 42 U.S.C. §§ 6901 *et seq.* The following December, we filed a Complaint in the United States District Court for the Eastern District of California against State Parks (Case No. CIV S-04-2647 KJM) and an Amended Complaint January 2006.

Since filing its citizen enforcement action in 2004, Deltakeeper continues to work diligently with State Parks to provide a timely, effective clean-up of the Magenta Drain discharge and sufficient storm-water pollution protections at Empire protecting Little Wolf Creek and the Grass Valley community from toxic runoff at the mine.

C. Consent Decree Agreements about Magenta Drain

This past January, agreeing limited state resources are best spent addressing the mine pollution in the most expedient way possible, State Parks and Deltakeeper signed a Consent Decree to settle the litigation regarding Empire Mine discharges of pollutants. As part of the Consent Decree, State Parks agreed to:

- Comply with this NPDES permit regulating Magenta Drain discharges
- Apply for $5 million in the State Budget to implement specific pollution control measures, and other remedial measures as well as commit to applying for any future needed funding
- Work with Deltakeeper to determine effective interim measures for "treating, reducing, and/or eliminating the pollutants in the water discharged from the Magenta Drain."
- Work with the Department of Toxic Substances Control ("DTSC") to conduct all removal and remedial actions required by DTSC to address hazardous substances at Empire Mine (with continued monitoring of project progress by Deltakeeper)
- Post bilingual signs warning the public of the hazardous nature of the Magenta Drain discharge and the waters receiving the discharge

Deltakeeper entered into this Consent Decree with an understanding that both storm water and the Magenta Drain discharge would meet CWA standards as quickly as possible in order to curtail pollution problems. In the Consent Decree, the parties agreed to meet and confer on or before June 1, 2008 to discuss whether the Consent Decree can be terminated as State Parks represented that they would be in full compliance with the Clean Water Act by that date. Deltakeeper noted State Parks would be required to act efficiently and swiftly to come into compliance with the Clean Water Act by 2008. However, the tentative permit does not require State Parks to act swiftly to control the pollutants in the Magenta Drain discharge.

Compliance with the NPDES permit, as signed in the Consent Decree, was never intended to allow for a compliance schedule and dangerously high interim levels of metals as found in this tentative permit. These allowances are not consistent with the federal Clean Water Act nor with Porter-Cologne.

III. Compliance Schedule Inadequacies

The timeframe proposed in this tentative permit does not comply with the Clean Water Act and does not protect the community and watershed from high levels of metals and other pollutants until 2010. Given the illegality of compliance schedules, the ineligibility to apply SIP allowances, and the danger a compliance schedule would present to this community, Deltakeeper finds the 2010 delay in compliance completely unacceptable.

A. State Senate Expects Timely Remediation

In addition to Deltakeeper's concerns regarding the tentative permit and compliance schedule and TSO, the California State Senate Budget Subcommittee #2 staff report addressed compliance concerns in their staff report for the March 2006 budget subcommittee meeting. The Senate is extremely concerned about any delay in State Parks compliance with the Clean Water Act requirements: "Staff understands the need for some additional studies, but also is concerned that actual work to reduce pollution from the park not be delayed." (Staff report, March 2006). The tentative permit does nothing to address the Senate's concern that State Parks' work to "reduce pollution from the park not be delayed."

B. State Parks Is Ineligible for State Implementation Policy's Compliance Schedule Allowance

As set forth in the Consent Decree, State Parks agreed with Deltakeeper to be in compliance with the Clean Water Act requirements as soon as possible[2]. In fact, as set forth in the Consent Decree, State Parks represented to Deltakeeper that they would be in full compliance by 2008—two years before this permit would even require compliance with protective water quality standards.

The tentative permit says the SIP allows the Regional Board to provide a discharger with a compliance schedule *if the discharger can show immediate compliance with the protective California Toxic Rule levels is infeasible.* Deltakeeper does not believe this policy is consistent with the CWA. Further, for this permit, the discharger can meet and indeed must meet CTR prior to 2010.

The permit provides for a workplan and time schedule to be complete September 2006, a study to be done November 2006-October 2007, and a study report to be submitted November 2007. Many studies have already begun. The SIP justification letter from State Parks mentions the Tetra Tech Report conducted in 2004 which characterized the surface water and sediment from Magenta Drain in both wet and dry seasons. State Parks took additional samples in 2005-2006 and State Parks intends to start continuous flow sampling in May 2006. This tentative permit does not require continuous sampling (for flow, pH, turbidity, electrical conductivity) until May 2010—four years later than State Parks can begin.

While more studies need to be done to better understand the exact source of the toxic material discharging from Magenta Drain, it is still totally feasible to begin treatment. The Magenta Drain report discusses options of vacuuming the sediment, installing a year-round treatment system on-site, and stopping discharge for off-site treatment. Removal of the sediment alone will vastly decrease the propensity for increased flow to suspend the toxic sediments into the creek downstream. All of these are treatments that can be done within a year or so timeframe. The SIP letter from State Parks acknowledges that sediment removal is being considered as an interim measure but would require additional permits through other agencies. In fact, the SIP letter also states: "It is anticipated that the treatment system will be designed and implemented during the 2006-2007 fiscal year."

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[2] In fact, State Parks agreed to be in full compliance with the Clean Water Act and California's Industrial Storm Water Permit by February 21, 2006, - a date that State Parks did not meet.

Further, in the case of Empire Mine, Deltakeeper is not aware of any economic reason that remediation cannot go forth promptly. State Parks has already had a past allocation of $500,000 from the Department of Conservation to fund a human health risk assessment and storm water pollution prevention plan, a current proposed budget item of $5 million for the 2006-07 fiscal year and is talking with the previous mine owner for financial assistance with remediation.

While the cost of the remediation of this legacy pollution is significant, the cost of any public or wildlife health impacts from such dangerously high interim levels outweighs any bills for treatment.

Deltakeeper is unsure why the Regional Board is proposing to not require protective, final effluent limits until 2010. Three or four extra years of toxic discharge is three or four too many for Grass Valley residents. Compliance is feasible in a timeframe much shorter than the one proposed here.

C. The Proposed Compliance Schedule and Interim Effluent Limits Illegally Delay Achievement of Water Quality Standards

The Clean Water Act mandates that:

> there shall be achieved . . . not later than July 1, 1977, any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations . . . or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.

CWA § 301(b)(1)(C), 33 U.S.C. § 1311(b)(1)(C) (emphasis added). Despite this unambiguous, 27-year-old statutory deadline for achieving water quality-based effluent limitations, the proposed Time Schedule Order authorizes compliance schedules that give State Parks close to four more years to achieve water quality-based effluent limitations for priority toxic pollutants.

Because State Parks alleges it is infeasible to achieve immediate compliance with the CTR criterion or the effluent limitation based on a CTR criterion for certain pollutants, the proposed permit omits water quality-based effluent limits on these parameters and instead imposes a compliance schedule and interim permit limits far more lenient than water quality-based effluent limits. In so doing, the permit gives State Parks an extension for meeting water quality-based effluent limits that extends far beyond the statutory deadline in CWA section 301(b)(1)(C) for achieving water quality-based effluent limitations. 33 U.S.C. § 1311(b)(1)(C). This approach is blatantly illegal and, if upheld, would directly undermine the water quality standards that are the heart of the Clean Water Act.

1. Section 301(b)(1)(C) establishes a firm deadline for complying with water quality-based effluent limitations.

Numerous courts have held that neither the EPA nor the states have the authority to extend the deadlines for compliance established by Congress in CWA section 301(b)(1). 33 U.S.C. §1311(b)(1); See *State*

Water Control Board v. Train, 559 F.2d 921, 924-25 (4th Cir. 1977) ("Section 301(b)(1)'s effluent limitations are, on their face, unconditional."); *Bethlehem Steel Corp. v. Train*, 544 F.2d 657, 661 (3d Cir. 1976), cert. denied sub nom. *Bethlehem Steel Corp. v. Quarles*, 430 U.S. 975 (1977) ("Although we are sympathetic to the plight of Bethlehem and similarly situated dischargers, examination of the terms of the statute, the legislative history of [the Clean Water Act] and the case law has convinced us that July 1, 1977 was intended by Congress to be a rigid guidepost").

This deadline applies equally to technology-based effluent limitations and water quality-based effluent limitations. See *Dioxin/Organochlorine Ctr. v. Rasmussen*, 1993 WL 484888 at *3 (W.D. Wash. 1993), aff'd sub nom. Dioxin/Organochlorine Ctr. v. Clarke, 57 F.3d 1517 (9th Cir. 1995) ("The Act required the adoption by the EPA of 'any more stringent limitation, including those necessary to meet water quality standards,' by July 1, 1977.") (citation omitted); *Longview Fibre Co. v. Rasmussen*, 980 F.2d 1307, 1312, (9th Cir. 1992) ("[Section 1311(b)(1)(C)] requires achievement of the described limitations 'not later than July 1, 1977.' ") (citation omitted). Any discharger not in compliance with a water quality-based effluent limitation after July 1, 1977, violates this clear congressional mandate. See *Save Our Bays and Beaches v. City & County of Honolulu*, 904 F. Supp. 1098, 1122-23 (D. Haw. 1994).

Congress provided no blanket authority in the Clean Water Act for extensions of the July 1, 1977, deadline, but it did provide authority for the states to foreshorten the deadline. Section 1313(f) of the Clean Water Act provides that:

> [n]othing in this section [1313] shall be construed to affect any effluent limitations or schedule of compliance required by any State to be implemented prior to the dates set forth in section 1311(b)(1) and 1311(b)(2) of this title nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

33 U.S.C. § 1313(f) (emphasis added). Because the statute contains explicit authority to expedite the compliance deadline but not to extend it, the Regional Board may not authorize extensions beyond this deadline in discharge permits.

2. The July 1, 1977, deadline applies even where water quality standards are established after that date.

The July 1, 1977, deadline for achieving water quality-based effluent limitations applies equally even if the applicable water quality standards are established after the compliance deadline. Section 1311(b)(1)(C) requires the achievement of "more stringent limitations necessary to meet water quality standards . . . established pursuant to any State law . . . or required to implement any applicable water quality standard established pursuant to this chapter." 33 U.S.C. § 1311(b)(1)(C) (emphasis added). Congress understood that new water quality standards would be established after the July 1, 1977, statutory deadline; indeed, Congress mandated this by requiring states to review and revise their water quality standards every three years. See Id. § 1313(c). Yet Congress did not draw a distinction between achievement of water quality standards established before the deadline and those established after the deadline.

Prior to July 1, 1977, therefore, a discharger could be allowed some time to comply with an otherwise applicable water quality-based effluent limitation. Beginning on July 1, 1977, however, dischargers were required to comply as of the date of permit issuance with water quality-based effluent limitations, including those necessary to meet standards established subsequent to the compliance deadline.

3. Congress has authorized limited extensions for specific purposes, precluding exceptions for other purposes.

In the Clean Water Act Amendments of 1977, Congress provided limited extensions of the July 1, 1977, deadline for achieving water quality-based effluent limitations. In CWA section 301(i), Congress provided that "publicly-owned treatment works" ("POTWs") that must undertake new construction in order to achieve the effluent limitations, and need federal funding to complete the construction, may be eligible for a compliance schedule that may be "in no event later than July 1, 1988." 33 U.S.C. § 1311(i)(1) (emphasis added). Congress provided for the same limited extension for industrial dischargers that discharge into a POTW that received an extension under section 1311(i)(1). See Id. § 1311(i)(2). In addition, dischargers that are not eligible for the time extensions provided by section 1311(i) but that do discharge into a POTW, may be eligible for a compliance schedule of no later than July 1, 1983. See Id. § 1319(a)(6).

The fact that Congress explicitly authorized certain extensions indicates that it did not intend to allow others which it did not explicitly authorize. In *Homestake Mining*, the Eighth Circuit held that an enforcement extension authorized by section 1319(a)(2)(B) for technology-based effluent limitations did not also extend the deadline for achievement of water quality-based effluent limitations. 595 F.2d at 427-28. The court pointed to Congress' decision to extend only specified deadlines:

> Having specifically referred to water quality-based limitations in the contemporaneously enacted and similar subsection [1319](a)(6), the inference is inescapable that Congress intended to exclude extensions for water quality-based permits under subsection [1319](a)(5) by referring therein only to Section [1311](b)(1)(A).

Id. at 428 (citation omitted). By the same reasoning, where Congress extended the deadline for achieving effluent limitations for specific categories of discharges and otherwise left the July 1, 1977, deadline intact, there is no statutory basis for otherwise extending the deadline.

4. Schedules of compliance may be issued only to facilitate, not to avoid, achievement of effluent limitations by the statutory deadline.

The Clean Water Act defines the term effluent limitation as:

> any restriction established . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

33 U.S.C. § 1362(11). The term schedule of compliance is defined, in turn, as "a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard." Id. § 1362(17). The purpose of a compliance schedule is to facilitate compliance with an effluent limitation by the applicable deadline by inserting interim goals along the way:

> [a] definition of effluent limitations has been included so that control requirements are not met by narrative statements of obligation, but rather are specific requirements of specificity as to the quantities, rates, and concentration of physical, chemical, biological and other constituents discharged from point sources. It is also made clear that the term effluent limitation includes schedules and time tables of compliance. The Committee has added a definition of schedules and time-tables of compliance so that it is clear that enforcement of effluent limitations is not withheld until the final date required for achievement.

S. Rep. No. 92-414, at 77, reprinted in 1972 U.S.C.C.A.N. 3668 (Oct. 28, 1971) (emphasis added). Thus, Congress authorized compliance schedules, not to extend its deadlines for achievement of effluent limitations, but to facilitate achievement by the prescribed deadlines.

In *United States Steel Corp*., the industry plaintiff argued that 33 U.S.C. § 1311(b)(1)(C) allows the July 1, 1977, deadline to be met simply by beginning action on a schedule of compliance that eventually would result in achieving the technology- and water quality-based limitations. 556 F.2d at 855. The Court of Appeals disagreed:

> [w]e reject this contorted reading of the statute. We recognize that the definition of 'effluent limitation' includes 'schedules of compliance,' section [1362(11)], which are themselves defined as 'schedules . . . of actions or operations leading to compliance' with limitations imposed under the Act. Section [1362(17)]. It is clear to us, however, that section [1311(b)(1)] requires point sources to achieve the effluent limitations based on BPT or state law, not merely to be in the process of achieving them, by July 1, 1977.

Id. Thus, compliance schedule may not be used as a means of evading, rather than meeting, the deadline for achieving water quality-based effluent limitations.

5. States may not issue permits containing effluent limitations that are less stringent than those required by the Clean Water Act.

Finally, a compliance schedule that extends beyond the statutory deadline would amount to a less stringent effluent limit than required by the Clean Water Act. States are explicitly prohibited from establishing or enforcing effluent limitations less stringent than is required by the Clean Water Act. See 33 U.S.C. § 1370; Water Code §§ 13372, 13377. The clear language of the statute, bolstered by the legislative history and case law, establishes unambiguously that compliance schedules extending beyond the July 1, 1977, deadline may not be issued in discharge permits. The tentative permit, however,

purports to do just that. By authorizing the issuance of permits that delay achievement of effluent limitations for over thirty years beyond Congress' deadline, the proposed permit makes a mockery of the CWA section 301(b)(1)(C) deadline and exceeds the scope of the Regional Board's authority under the Clean Water Act and the Porter-Cologne Act. 33 U.S.C. § 1311(b)(1)(C).

IV. The TSO and Compliance Schedule Set Dangerously High Interim Effluent Limitations

The Clean Water Act and its NPDES permit scheme have been established to ensure that, when discharges must occur, that the wastewater does not impair beneficial uses of receiving waters--like recreational use and aquatic health. As discussed above, compliance schedules with interim effluent limitations are not consistent with the mandate of the Clean Water Act. Beyond their illegality, the interim effluent limitations proposed in the tentative permit and in the proposed time schedule order allow State Parks to discharge pollutants at dangerously high levels. The interim limits proposed are not meant to be protective but to incorporate the broadest levels that might be discharged from Empire before effluent treatment is in place. Deltakeeper believes an interim limit should be the best case, not the worst case, scenario.

A. The Interim Effluent Limitations in the Proposed Time Schedule Order Are Unreasonably High

The proposed time schedule order sets forth the "interim, performance-based effluent limitations" that apply to Aluminum, Antimony, Arsenic, Barium, Cobalt, Iron, Manganese, Vanadium, and Total Suspended Solids in the Magenta Drain discharge. Although titled "limitations" the discharge levels permitted under the proposed time schedule order are the "Projected Maximum" levels that the Regional Board calculated could possibly be discharged from the Magenta Drain. The chart below provides a comparison of "effluent limitations" established in the proposed time schedule order and the water quality criteria that are protective of relevant the beneficial uses.

The proposed "effluent limitations" subvert the purpose of the Clean Water Act of protecting water quality and serve no purpose but to ensure that State Parks will never discharge any of these pollutants above the permitted levels.

Parameter (all units ug/L)	What Standards are Protecting	Protective Standard-Concentra-tion ug/L	Average Monthly Effluent Limitation permitted under Time Schedule Order	Final Average Monthly Effluent Limitation	Final Daily Maximum Effluent Limitation
Aluminum, Total Recoverable	Designated Beneficial Uses	71	151,000	71	140
Antimony, Total Recoverable	Designated Beneficial Uses	6	415	6	--
Arsenic, Total Recoverable	Designated Beneficial Uses	10	558,000	10	--
Barium, Total Recoverable	Designated Beneficial Uses	1,000	10,400	1,000	--
Cobalt, Total Recoverable	Designated Beneficial	50	1,080	50	--

Parameter (all units ug/L)	What Standards are Protecting	Protective Standard-Concentra-tion ug/L	Average Monthly Effluent Limitation permitted under Time Schedule Order	Final Average Monthly Effluent Limitation	Final Daily Maximum Effluent Limitation
Iron, Total Recoverable	Uses Designated Beneficial Uses	300	75,600,000	300	--
Manganese, Total Recoverable	Designated Beneficial Uses	50	2,700,000	50	--
Vanadium, Total Recoverable	Designated Beneficial Uses	100	960	100	--
Total Suspended Solids	Designated Beneficial Uses		27,900	20,000	30,000

B. The Interim Effluent Limitations in the Tentative Permit Are Unreasonably High

The chart below, based on information in the permit, compares the final limits and protective standards with interim limits (in red)—an astronomical difference for every metal listed. For Cadmium, the daily interim allowance is 60,000 times the public health standard concentration; for Chromium, 9 times higher; for copper, 12 times; for lead, almost 1200 times higher; for nickel, over 5 times higher; for thallium, almost 12,000 times higher; for zinc, 460 times the Basin Plan objective; and, for mercury, the maximum daily interim level is over 18,000 times higher.

These exponentially higher allowances put aquatic life and human health in danger.

Parameter (all units ug/L)	**What Standards are Protecting**	**Protective Standard-Concentra-tion ug/L**	**Effluent Limitations**				
			Protective Standard-Quantitative ug/L	**Average Monthly**	**Maximum Daily**	**FINAL LIMITS Monthly AVG**	**FINAL LIMITS MAX DAILY**
Cadmium, Total Recoverable	Freshwater aquatic life	Public Health 0.07	0.25	**2,100**	**4,200**	0.26	0.53
Chromium (III)	Freshwater aquatic life	Public Health (total Chr) 50	5	**220**	**450**	36	72
Copper, Total Recoverable	Freshwater aquatic life	NTR 4.1 (2)	0.5	**170**	**350**	1.2	2.3
Lead, Total Recoverable	Freshwater aquatic life	CTR 0.92 (2)	0.5	**560**	**1,100**	0.23	0.47
Mercury, Total Recoverable	Human health, cancer	------	0.0005	**4.9**	**9.2**	0.050	0.1
Nickel, Total Recoverable	Freshwater,saltwater aquatic health	CTR-24	5	**65**	**130**	8.6	17
Thallium, Total Recoverable	Risk for human cancer from drinking water, eating aquatic life	NTR 1.7	1	**5,900**	**20,000**	1.7	5.6
Zinc, Total Recoverable	Freshwater aquatic health	CTR/Basin Plan 54/16	10	**3,700**	**7,400**	12	24

C. The Tentative Permit Needs Clarification on Interim Tests

The permit provides a chart listing interim limits for several constituents—cadmium, chromium, copper, lead, mercury, nickel, thallium and zinc. Other constituents from the final effluent limit chart: TSS, solids, pH, Turbidity, color, aluminum, antimony, arsenic, barium, cobalt, manganese, and vanadium do not have specific interim limits.

Deltakeeper asks staff for clarification on whether the permit requires testing of those items *not* listed in the interim chart and, if so, whether these constituents must meet the final effluent limits. Arsenic, for example, has a USEPA Primary MCL of 10 ug/L but was found previously at Magenta Drain at 35,400 ug/L and barium's MCL of 1000 ug/L has been exceeded up to 2480 ug/L in 2003. At what levels must State Parks address these and other constituents in the interim?

D. Protecting the Public *Is* Possible

Even more concerning, the permit predicts an increase in public contact with the creek due to the regional population growth and accessibility to the discharge flows. The conclusion in the permit is that "exclusion of the public is unrealistic." We hope that this is not the case and are content State Parks states they will have a fence up around the portal soon. However, due to the presence of the effluent-based creek beyond State Parks' land, it may be tough to keep the public out of it. Increased public contact strengthens the existing need and reason for protective interim limits and a short compliance schedule.

IV. The Permit's Monitoring Requirements Are Inadequate

A. Groundwater Monitoring

Deltakeeper notes the NPDES permit does not address groundwater monitoring and would like staff to address the potential for groundwater contamination and any potential impact on local residential wells. The State Antidegradation Policy, as noted in the permit, provides for protecting both ground and surface water.

B. Sediment Monitoring

We also note a lack of sediment monitoring other than the solids at time of removal from the creek. In order to prepare a permit thoroughly addressing toxicity issues with the discharge and given the possibility for metals to deposit within the sediment over time, we recommend adding sediment monitoring for constituents previously found in the sediment such as mercury and arsenic.

Specifically, Deltakeeper recommends monthly testing until sediment is removed and, after removal, annual testing to ensure no new deposition of toxic heavy metals.

C. Mass Loading/Limitations Missing

The permit explanation for federal policy clearly shows that mass loading must be addressed in NPDES permits. Beyond the legality, science also tells us that mass loading needs addressing for Magenta Drain's permit. Mass loading is critical to understand the long-term build-up of bioaccumulants, like mercury, known to be present at the portal. The permit provides for the potential to later add-in mass loading requirements but this does not sufficiently meet the legal and scientific imperatives for compliance with the CWA.

D. Methyl-mercury

Methyl-mercury, the bioavailable form of this heavy metal, causes risks to people and wildlife consuming fish and aquatic organisms. However, the tentative permit only includes a numeric limit for total mercury. During this time in which the Regional Board is addressing the crisis legacy mercury and methyl-mercury have created in the Bay-Delta, we believe the permit must also require methyl-mercury level monitoring at a level protective of subsistence fishing and aquatic health.

It is not appropriate to await a TMDL in order to establish a limit, particularly when Bear Creek is listed as impaired for mercury and we are posting fish-consumption warnings downstream.

E. Hardness

We appreciate the Regional Board's willingness to provide a re-evaluation of the hardness levels for calculating water quality limits after more data is available from the Magenta Drain area.

F. Data Maintenance

Sampling records, according to the tentative permit, must be held 5 years. Both as reference for future mine remediation projects and for the long-term evaluation of compliance, we recommend data be held 7-10 years (which will be past the expiration date of this permit).

V. Conclusion

The Deltakeeper Chapter of Baykeeper appreciates Regional Board consideration of the importance of drafting a permit including requirements for State Parks to come into immediate compliance with the Clean Water Act as contemplated by the Court in the Consent Decree. Deltakeeper acknowledges State Parks continued work towards fulfilling the requirements of the Consent Decree in order to protect this beautiful community and riparian system. However, the Regional Board is proposing to adopt a permit that does not comply with the Clean Water Act, and in fact authorizes the continued degradation of Grass Valley waterways. The Deltakeeper Chapter is confused and disappointed that the Regional Board is presenting a tentative permit with a time schedule much longer that that for which the dischargers themselves has proposed.

The public expects the State to set the standard for complying with the law and relies on agencies like the Regional Board to ensure other agencies do not use loopholes to evade the law.

If the private sector sees the Regional Board supports permits allowing a public agency to continue polluting astronomic levels of heavy metals for several years--why should those industries expect any different treatment?

More importantly, how will the Regional Board address the families who find their kids—maybe too young or short to see the warning signs—trying to cool off from the hot foothill summers in this creek with toxic metal levels thousands of times higher than safe limits?

Thank you for addressing our concerns. Please feel free to contact me at 916-952-2185 (cell), 209-464-5090 (work) or carrie@baykeeper.org if you have any questions.

Sincerely,

Carrie McNeil DVM
Deltakeeper
Deltakeeper Chapter of Baykeeper